

Name: _____

at1110paper__practice__test (v0)

1. Expand the following expression into standard form.

$$(4x + 3)(8x + 5)$$

$$32x^2 + 20x + 24x + 15$$

$$32x^2 + 44x + 15$$

2. Solve the equation.

$$(2x - 5)(4x + 7) = 0$$

$$x = \frac{5}{2} \quad x = \frac{-7}{4}$$

3. Expand the following expression into standard form.

$$(7x - 4)(7x + 4)$$

$$49x^2 + 28x - 28x - 16$$

$$49x^2 - 16$$

4. Expand the following expression into standard form.

$$(5x - 9)^2$$

$$25x^2 - 45x - 45x + 81$$

$$25x^2 - 90x + 81$$

5. Factor the expression.

$$x^2 - x - 20$$

$$(x + 4)(x - 5)$$

6. Factor the expression.

$$36x^2 - 49$$

$$(6x + 7)(6x - 7)$$

7. Solve the equation with factoring by grouping.

$$8x^2 - 10x - 12x + 15 = 0$$

$$(2x - 3)(4x - 5) = 0$$

$$x = \frac{3}{2} \quad x = \frac{5}{4}$$

8. Solve the equation.

$$7x^2 - 17x - 51 = 2x^2 + 5x - 3$$

$$5x^2 - 22x - 48 = 0$$

$$(5x + 8)(x - 6) = 0$$

$$x = -\frac{8}{5} \quad x = 6$$